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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,317	10/25/2000	Hiroshi Yamada	Q59785	1183

7590

01/24/2003

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EXAMINER

HARLAN, ROBERT D

ART UNIT

PAPER NUMBER

1713

DATE MAILED: 01/24/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/695,317

Applicant(s)

YAMADA ET AL.

Examiner

Robert D. Harlan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

The Amendment and Petition for Time Extension filed by Applicant on 11/14/02 has been entered.

Response to Amendment/Arguments

Applicant's amendment and arguments filed on 11/14/02 have been fully considered and they are found unpersuasive.

The objection of claim 1 because of informalities is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the

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examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-14 remain rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hojo et al., U.S. Patent No. 6,380,288 (hereinafter "Hojo"). Hojo discloses a rubber composition prepared by compounding 0.05 to 20 parts by weight of a hydrazide compound and a rubber selected from the group consisting of natural rubber and synthetic rubber (i.e. polybutadiene). See Hojo, Abstract; col. 2, line 15 through col. 5, line 48; col. 17, lines 14-45. Hojo further teaches that the rubber compositions

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are useful as tire tread. See Hojo, col. 4, lines 60-67. Hojo specifically teaches the use of 3-hydroxy-N'-(1,3-dimethylbutylidene)-2-naphthohydrazide in the rubber composition. See Hojo, Example 10. Hojo further teaches the use of HAF grade carbon black as reinforcing filler. See Hojo, Table 1. Hojo does not disclose all the properties of the carbon black delineated in the claimed invention, the present specification explicitly states that "carbon blacks of HAF grade to SAF grade that satisfy the various conditions described above can be preferably used in the present invention." Although Hojo does not disclose all the characteristics and properties of the carbon black disclosed in the present claims, based on other substantially identical properties noted above, the Examiner has a reasonable basis to believe that the properties, Dw/Dn and Tint, claimed in the present invention are inherent in the carbon black disclosed by Hojo. Because the PTO has no means to conduct analytical experiments, the burden of proof is shifted to the Applicants to prove that the properties are not inherent. See In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Best, 195 USPQ 430 (CCPA 1977); In re Napier, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995).

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The claiming of a new use, new function or unknown property, which is inherently present in the prior art, does not necessary make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). However, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. See In re Rijckaert, 9 F.3d. 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessary due to optimization of conditions, not what was necessarily present in the prior art). "To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing describe in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" See In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic

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necessarily flows from the teachings of the applied prior art."

Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter.
1990).

Even if the disclosure of Hojo does not satisfy the requirements of 35 USC 102(e), it still would have been obvious to one of ordinary skill in the art to arrive at the claimed rubber compositions, because it appears that the claimed rubber compositions are within the generic disclosure of Hojo and a person of ordinary skill in the art would have expected all embodiment of Hojo to have similar properties. Furthermore, the Examiner finds nothing in the disclosure of Hojo that would suggest that the properties of the ethylene homopolymers are different from the properties of the claimed ethylene homopolymers. The evidence presented to rebut the prima facie case of obviousness must be commensurate in scope with the claims to which it pertains. See In re Dill and Scales, 202 USPQ 805 (CCPA 1979).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-14 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al., JP Application No. 09-111839 (hereinafter "Suzuki") in view of Etho et al., EP 0 478 274 A1 (hereinafter "Etho"). Suzuki discloses carbon black for tire treads. See Suzuki, Abstract. In the working examples, Suzuki

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further discloses carbon black with the following property ranges:

- a. N_2SA : 146-204 m^2/g
- b. IA : 140-212 mg/g
- c. $CTAB$: 122-162 mg/g
- d. N_2SA/IA : 0.886-1.032 m^2/g
- e. DBP : 107-163 ml/100g
- f. D_{50}/D_{st} : 0.793-1.133.

Suzuki differs from the present invention in that Suzuki does not disclose the use of hydrazides.

Etoh discloses, in analogous art, a rubber composition with reinforcing filler and hydrazide used in tire tread. See Etoh, page 4, lines 18-39. In view of Etoh, one having an ordinary skill in the art would be motivated to modify Suzuki by using a hydrazide in the rubber composition. Such modification would be obvious because one would expect that the use of rubber composition as taught by Suzuki would be similarly useful and applicable to the rubber compositions taught in Etoh.

Furthermore, the references Etoh and Suzuki are both dedicate to the same goal: develop rubber compositions for tire treads, which provides low fuel composition and improved war resistance.

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Thus, Etoh in view of Suzuki holds claims 1-12 and 14 unpatentable.

The Applicants argue neither Suzuki nor Etoh teach or suggest the presently claimed Dw/Dn and Tint. The Examiner contends these missing properties are inherent in Suzuki or Etoh. Because the PTO has no means to conduct analytical experiments, the burden of proof is shifted to the Applicants to prove that the properties are not inherent. See In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Best, 195 USPQ 430 (CCPA 1977); In re Napier, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995).

Conclusion

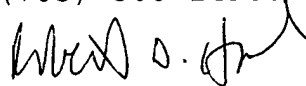
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert D. Harlan whose telephone number is (703) 306-5926. The examiner can normally be reached on Mon-Fri, 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (703) 308-2450. The fax phone numbers for the

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organization where this application or proceeding is assigned
are (703) 872-9559 for regular communications and (703) 872-9559
for After Final communications.

Any inquiry of a general nature or relating to the status
of this application or proceeding should be directed to the
receptionist whose telephone number is (703) 308-1495.


Robert D. Harlan
Examiner
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rdh
January 17, 2003